

## II.B.2.N.b.400. FRAXINUS ANOMALA TEMPORARILY FLOODED WOODLAND ALLIANCE

Single-leaf Ash Temporarily Flooded Woodland Alliance

### FRAXINUS ANOMALA WOODLAND

Single-leaf Ash Woodland

#### ELEMENT CONCEPT

**GLOBAL SUMMARY:** This locally occurring association is found in deep canyons and mountains on the Colorado Plateau in southwestern Utah and western Colorado. This vegetation is restricted to mesic sites such as near seeps, springs and ephemeral stream channels, or on lower colluvial slopes where additional soil moisture is available. Substrates often are derived from colluvium and have large amounts of gravel and cobbles. Parent material is typically sandstone. The vegetation is characterized by a moderately dense (30-50%) cold-deciduous tall-shrub canopy that is dominated by *Fraxinus anomala* with *Quercus gambelii* codominating the Colorado stand. Associated shrubs include *Amelanchier alnifolia*, *Ericameria nauseosa*, *Holodiscus dumosa*, *Rhus trilobata*, and *Symphoricarpos rotundifolius*. Herbaceous species are variable and contribute minimal cover.

#### ENVIRONMENTAL DESCRIPTION

**USFWS Wetland System:** Not Applicable

**Zion National Park Environment:** This association occurs at 4300 feet in a moderately steep, east-facing drainage. Soil texture is loamy sand.

**Global Environment:** This woodland association is found in deep canyons and mountains on the Colorado Plateau in southwestern Utah and western Colorado. Elevation ranges from 1430-2000 m (4300-5825 feet). Climate is semi-arid; however, this vegetation is restricted to mesic sites such as near seeps, springs and ephemeral stream channels, or on lower colluvial slopes where additional soil moisture is available. Substrates often are derived from colluvium and have large amounts of gravel and cobbles. Parent material is typically sandstone.

#### VEGETATION DESCRIPTION

**Zion National Park Vegetation:** This association, though only documented once in the park, likely occurs in small pockets where moisture collects at the base of boulders in ravines and colluvial slopes. *Fraxinus anomala* is dominant with 30% cover and heights of approximately 5 m. Shrubs that are likely to occur are *Amelanchier alnifolia*, *Rhus trilobata*, and *Ericameria nauseosa*. Herbaceous species are variable and contribute minimal cover.

**Global Vegetation:** This association is characterized by a moderately dense (30-50%) cold-deciduous tall-shrub canopy that is dominated by *Fraxinus anomala* with *Quercus gambelii* codominating the Colorado stand. Associated shrubs include *Amelanchier alnifolia*, *Ericameria nauseosa*, *Holodiscus dumosa*, *Rhus trilobata*, *Symphoricarpos rotundifolius*, and the vine *Vitis arizonica*. Herbaceous species are variable and contribute minimal cover. Common species include *Achnatherum hymenoides*, Asteraceae spp., *Eriogonum* spp., and *Poa fendleriana*.

**Global Dynamics:** Information not available.

#### MOST ABUNDANT SPECIES

##### Zion National Park

<u>Stratum</u>	<u>Species</u>
TALL SHRUB	<i>Fraxinus anomala</i>

##### Global

<u>Stratum</u>	<u>Species</u>
TALL SHRUB	<i>Fraxinus anomala</i> , <i>Quercus gambelii</i> , <i>Amelanchier alnifolia</i>
SHORT SHRUB	<i>Ericameria nauseosa</i> , <i>Rhus trilobata</i>

### CHARACTERISTIC SPECIES

#### Zion National Park

##### Stratum

TALL SHRUB

SHORT SHRUB

##### Species

*Amelanchier alnifolia*, *Fraxinus anomala*

*Ericameria nauseosa*, *Rhus trilobata*

#### Global

##### Stratum

TALL SHRUB

##### Species

*Fraxinus anomala*

#### GLOBAL SIMILAR ASSOCIATIONS:

Information not available.

### GLOBAL STATUS AND CLASSIFICATION COMMENTS

**Global Conservation Status Rank:** GUQ.

**Global Comments:** This association is known from only 2 stands, one on the Roan Plateau in western Colorado and one in Zion National Park. More survey and classification work are needed to fully describe this association rangewide. *Fraxinus anomala* is present in many montane shrubland and woodland communities on the Colorado Plateau, but is only a dominant species in this association.

### ELEMENT DISTRIBUTION

**Zion National Park Range:** This association occurs in drainage that empties into Shune's Creek at the western border of the park.

**Global Range:** This woodland association occurs in canyons and mountains on the Colorado Plateau in southwestern Utah and western Colorado, and may occur in similar habitats in Arizona and New Mexico.

**Nations:** US

**States/Provinces:** AZ? CO NM? UT

### ELEMENT SOURCES

**Zion National Park Inventory Notes:** Plots: 523. This association was never seen again during Accuracy Assessments.

**Classification Confidence:** 3    **Identifier:** Cegl002752

**REFERENCES:** Kittel et al. 1999b, Welsh et al. 1987